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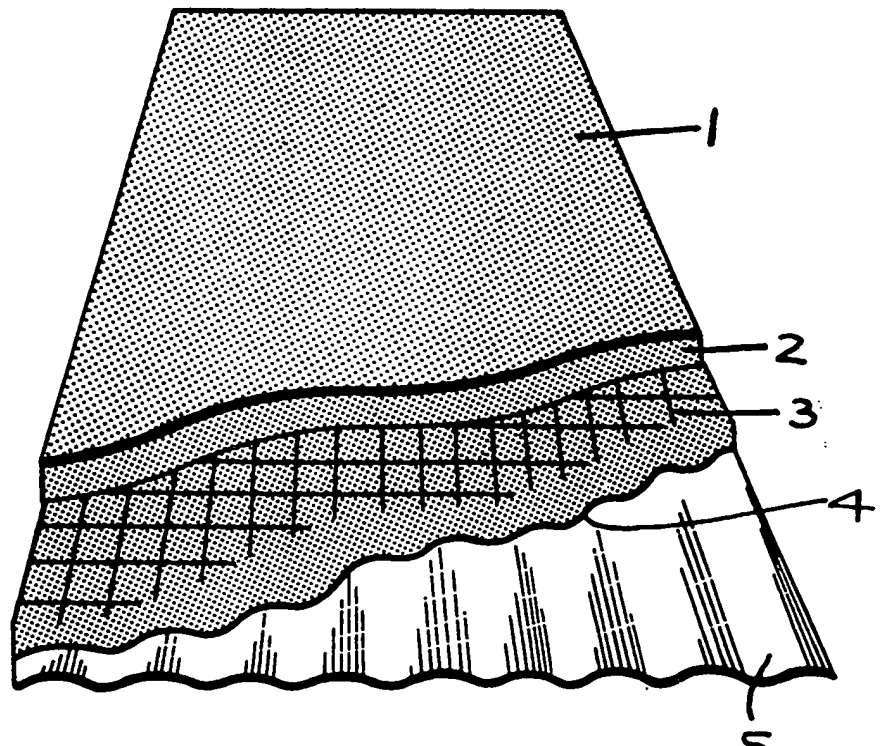
London EC1N 2JT

(54) Building board

(57) A light-weight heat-insulating board for use in the construction and repair of buildings comprises a pre-weathered outer layer (1) of waterproof material and an inner layer (2) of synthetic plastics foam reinforced by a netting (3) and having its inner surface (4) profiled to conform to the profile of a surface to which the board is to be applied.

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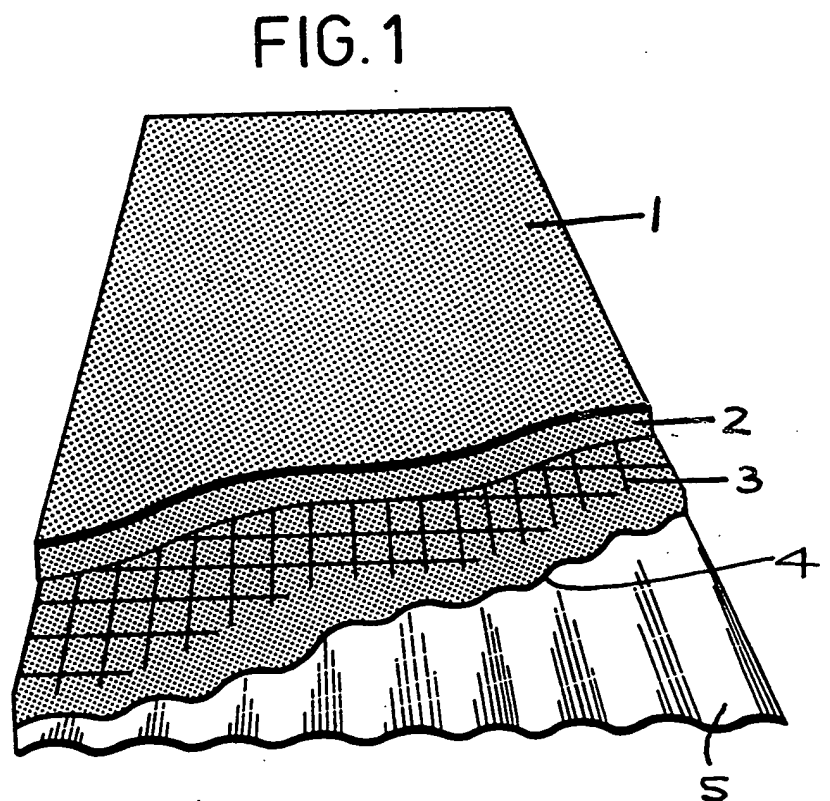
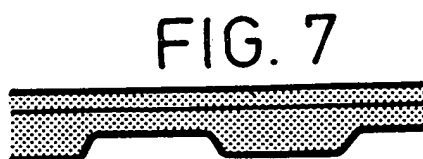
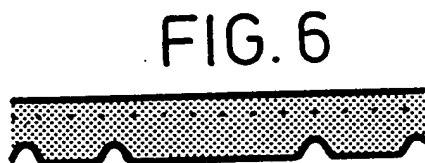
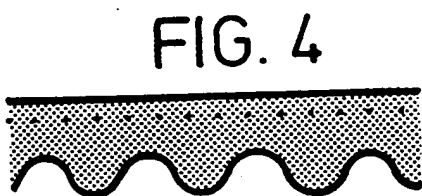
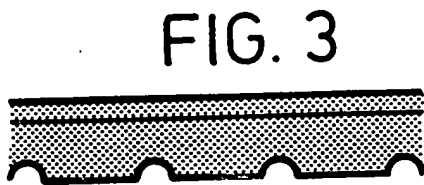
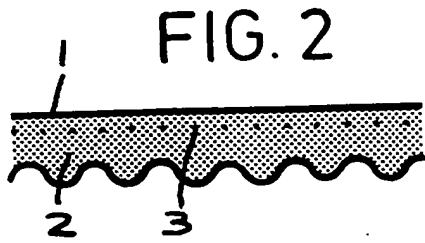
FIG.1



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SPECIFICATION

Building board

- 5 This invention relates to boards for use in the construction and repair of buildings and is particularly concerned with the provision of heat insulating boards which can be used on new buildings or for cladding roofs and exterior walls of old buildings to bring existing U-values up to modern requirements.

To this end, according to the invention, there is provided a light-weight heat-insulating board which comprises a pre-weathered outer layer of waterproof material and an inner layer of reinforced synthetic plastics foam of which the inner surface can be profiled during manufacture to conform to the profile of a surface to which the board is to be applied.

- 15 The pre-weathered waterproof material may consist of a suitable polymer, chlorosulphonated polyethylene, a polyester core saturated and coated with a polymer-modified bitumen or an asbestos/glass fibre or polyester base with a polymer-modified bitumen. The inner layer may comprise an urethane or polyisocyanurate foam or expanded polystyrene surrounding a reinforcement of bitumenised woven glass fibre netting or a polyester woven netting and the reinforced foam may be produced directly on the inner surface of the outer layer or formed separately and subsequently bonded to the outer layer by means of mastic or other suitable adhesive.

- 30 In the accompanying drawing:

Figure 1 is a perspective view with parts broken away and in section showing a board in accordance with the invention applied to an existing roof deck; and

- 40 *Figures 2 to 8* are cross-sectional views showing boards of similar construction formed with different profiles.

Referring to *Fig. 1*, a roof board constructed in accordance with the invention comprises a pre-weathered outer layer 1 of waterproof material and an inner layer 2 of synthetic plastics foam reinforced by a netting 3 of glass fibre or other suitable material. The underside of the foam layer 2 is formed with corrugations 4 during manufacture to conform to the corrugated profile of a roof decking 5 to which it is to be applied.

It will be seen from *Figs. 2 to 8* in which like reference numerals refer to the same parts as in *Fig. 1*, that the underside of the foam layer 2 may be formed, during manufacture, with a variety of profiles in accordance with requirements.

The board according to the invention, which may be produced in a variety of sizes, is factory pre-weathered and delivered to the site ready for use. It then only requires mechanical fixing with sealing and taping of joints.

support normal maintenance traffic without difficulty.

CLAIMS

- 70 1. A light-weight heat-insulating board for use in the construction and repair of buildings, said board comprising a pre-weathered outer layer of waterproof material and an inner layer of reinforced synthetic plastics foam.
- 75 2. A board according to Claim 1, wherein the inner surface of said inner layer is profiled during manufacture to conform to the profile of a surface to which the board is to be applied.
- 80 3. A board according to Claim 1 or 2, wherein said waterproof material consists of or contains a synthetic plastics material.
- 85 4. A board according to any one of Claims 1 to 3, wherein said synthetic plastics foam comprises a urethane, polyisocyanurate, or expanded polystyrene.
- 90 5. A board according to any preceding claim, wherein said synthetic plastics foam is reinforced by a netting of bitumenised glass fibre or polyester embedded therein.
- 95 6. A board according to any preceding claim, wherein said inner layer is produced directly on the inner surface of said outer layer.
7. A board according to any one of Claims 1 to 5, wherein said inner layer is bonded to said outer layer.
- 100 8. A light-weight heat-insulating board for use in the construction and repair of buildings, substantially as hereinbefore described and as shown in any one of *Figs. 1 to 8* of the accompanying drawings.